## NATIONAL AERONAUTICS AND SPACE ADMINISTRATION LYNDON B. JOHNSON SPACE CENTER

## JUSTIFICATION FOR OTHER THAN FULL AND OPEN COMPETITION PURSUANT TO TITLE 10 U.S.C. 2304(c)(1)

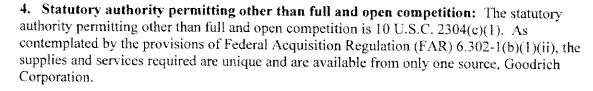
NASA WB-57 Aircraft Emergency Egress Upgrade Contract

- 1. This document is a Justification for Other than Full and Open Competition prepared by the NASA, Johnson Space Center.
- 2. The nature and/or description of the action being approved: This justification provides the rationale for contracting by other than full and open competition for the acquisition of WB-57F Emergency Escape System Support from Goodrich Corporation.
- 3. Description of the supplies or services required, include the estimated value: This procurement provides direct support to the WB-57 Program Office for the aircrew emergency escape system installed in the WB-57F aircraft operated by the Johnson Space Center (JSC). The required services are to support three WB-57 aircraft, two currently located at Ellington Field (EFD), Houston, Texas, and one WB-57 aircraft being regenerated from long term storage, soon to be located at EFD. The WB-57 is a mid-wing, long-range aircraft capable of operation for extended periods of time from sea level to altitudes well in excess of 60,000 feet. The support includes various engineering and manufacturing services associated with replacing the current system with the Advanced Concept Ejection Seat (ACES II) escape system. Specifically, the contractor will refurbish and retrofit a total of eight ejection seats that are currently owned by NASA, and will oversee the installation and integration of six of those seats into the WB-57 aircraft. Once installation is complete, the contractor will provide Original Equipment Manufacturer (OEM) certification of the services completed.

The ACES II escape system, as implemented in the F-15 aircraft, was determined to be the optimal replacement seat for the WB-57F because of the similarity between the emergency egress system in the WB-57 and the initial ESCAPAC emergency egress system in the F-15. Because of this similarity, the aircraft's structure supporting the ejection seats is essentially identical. The ACES II seat is a rugged, lightweight, easy-to-maintain ejection seat. It provides optimum performance across the full WB-57 escape envelope of 0 to 190 knots and altitudes from sea level to max altitude, and is designed to safely eject a crew member under zero-zero (0 altitude and 0 airspeed) conditions.

The ACES II is the most successful aircrew escape system in U.S. Air Force (USAF) history and is credited with saving more than 600 lives since it was introduced in 1978. The ACES II and the earlier SIIIS model, also produced by Goodrich Corporation (originally Douglas Aircraft Company), are the only ejection seats in the world with active pitch stabilization which provides consistent zero-zero recovery capability.

The estimated value for the effort is \$2 million for a 13-month contract period



- 5. A demonstration that the proposed contractor's unique qualifications or the nature of the acquisition requires use of the authority cited: NASA/JSC Aircraft Operations Division, WB-57 Program Office has a need for engineering and manufacturing services associated with replacing the current ESCAPAC emergency egress system with the ACES II system. This service is uniquely available from Goodrich Corporation, the OEM of the planned replacement ACES II seat. Because of the serious consequences of installing a faulty emergency egress system into the WB-57, it is critical to obtain OEM certification of the ACES II installation into the aircraft. Duplication of this effort, if even possible, would result in substantial cost to the Government and result in unacceptable delays in fulfilling the current WB-57 Program mission requirements.
- 6. Description of the efforts made to ensure that offers are solicited from as many potential sources as practicable: A synopsis was posted on www.FBO.gov on April 8, 2011, for a 15-day period.
- 7. Determination by the Contracting Officer that the anticipated cost to the Government will be fair and reasonable: Upon approval of this justification, a request for proposal will be issued to AMI Industries, Inc., dba Goodrich Interiors Specialty Seating Systems, 1275 N. Newport Road, Colorado Springs, Colorado, 80916. Their proposal will be evaluated and negotiated to obtain a fair and reasonable cost. Historical cost data, defense contract audit agency audit information, and certified cost or pricing data submitted by Goodrich Corporation will also be used to obtain a fair and reasonable cost.
- 8. Description of the market survey conducted and the results, or a statement of the reasons a market survey was not conducted: In accordance with FAR Part 10, a market survey was accomplished using the following market research techniques:
  - a. Personal knowledge of the market availability in procuring services of this type
  - b. Contact with other knowledgeable people in government, including experts with historical knowledge of the program and its evolving requirements
  - c. Review of Government and commercial database for relevant information, including the General Service Administration Advantage web site
  - d. Publication of a synopsis on April 8, 2011
  - e. Review of Government and commercial database including the Dynamic Small Business Search Database
  - f. Review of Internet resources for relevant information

None of the market research listed above revealed any evidence that other companies exist that could perform the requirements of the statement of work.



- 9. Other facts supporting the use of other than full and open competition: In 2004, Goodrich Corporation, under contract to the USAF, participated in an evaluation of the WB-57F escape system. Participating in that evaluation were engineering representatives from the USAF, NASA, and Goodrich Corporation. The ACES II system as implemented in the F-15 aircraft was determined to be the optimum replacement ejection seat. The need for a new seat is based on the difficulty in sustaining the installed ESCAPAC I-C ejection seat. The ESCAPAC system was originally deployed in early F-15 aircraft. The ACES II system was designed as a replacement for the ESCAPAC system. The aircraft structure used to mount the escape system is common to both seats. No structural modification to the WB-57F aircraft is required to install the ACES II system.
- 10. A listing of sources, if any, that expressed in writing an interest in the acquisition: Two companies, Cayley Aerospace, Inc., based in Seattle, Washington, and IDEA International, Inc. based in Mukilteo, Washington, responded to the synopsis posted on April 8, 2011. After a thorough review of the qualifications of each company by the COTR, it was determined that neither possessed the qualifications to perform the work required nor did they appear to have any past experience with the type of aircraft or type of systems that are a part of this program. Moreover, neither of these companies will be able to provide the necessary OEM certification that is fundamental to this acquisition. Due to the critical nature of the services to be performed, and based on the recommendation of the Contracting Officer's Technical Representative, the Contracting Officer determined that neither Cayley Aerospace nor IDEA International would be considered for this acquisition.
- 11. A statement of the actions, if any, the Agency may take to remove or overcome any barriers to competition before any subsequent acquisition for the supplies or services required: NASA will continue to monitor the market for companies that have developed technologies that can meet the requirements of this program. The WB-57F Program will continue to look for ways to reduce barriers to competition for future procurements.

## JOFOC - WB-57 Aircraft Emergency Egress Upgrade Contract

Technical Officer:

I certify that the supporting data presented in this justification are

accurate and complete.

Kevin J. Lesenski

Contracting Officer's Technical Representative

Contracting Officer:

I hereby determine that the anticipated cost to the Government will be fair and reasonable and certify that this justification is accurate and complete to the best of my knowledge and belief.

Scott A. Stephens / Contracting Officer

9/27/11 Date

CONCURRENCE:

Debra I Johnson

Director, Office of Procurement

<u>5/1/1/</u> Date

APPROVED:

Clery V

Ellen Ochoa

JSC Competition Advocate

5/20/11 Date